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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,201	12/19/2000	Theodore S. Hills	TAJ-0002	7649

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CANTOR COLBURN LLP  
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EXAMINER

SHRADER, LAWRENCE J

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/741,201

Applicant(s)

HILLS, THEODORE S.

Examiner

Lawrence Shrader

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/19/2000; 5/01/2002; 12/09/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2; 6, 7; 11, 12; 16, 17; 21, 22; 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 (hereinafter referred to as Chu) in view of Lee, U.S. Patent 5,692,180, and further in view of Segnan, U.S. Patent 5,889,995.

#### **In regard to claim 1:**

*“defining map container objects having keys...comprising strings conforming to requirements for identifiers;”*

*“using said keys of said map container objects as ordinary identifiers...;”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

*“declaring values of said keys as names qualified by said map container objects.”*

See Chu Figure 4.

*“using said map container objects as namespaces;”*

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces to organize the objects (column 2, lines 10

– 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, because the said combination allows the facilitation of a directory reference, as taught by Lee (column 2, lines 15 – 17), which provides for organization of objects representing uniquely identified names of resources.

The preamble of claim 1, *“A method of compiling or interpreting a source code ...”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code wherein the compiler or interpreter performs those functions. However, Segnan discloses a compiler to generate executable code from source code (column 5, line 65 – column 6, line 11) that searches a table for an assigned identifier. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segan invention having a compiler search the a table for an identifier, because this combination produces a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee.

**In regard to claim 2, incorporating the rejection of claim 1:**

*"...said objects are in a file system."*

Chu does not explicitly disclose the objects in a file system, however Lee does disclose the objects in a file system (See figure 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee having the container objects in a file system, because the said combination allows the facilitation of a directory reference to organize the objects providing a means to access to stored objects in order to create, add, delete, and modify names and other information in the objects, as taught by Lee (column 4, lines 35 - 40).

**In regard to claim 6:**

*"defining map container objects having keys...comprising strings conforming to requirements for identifiers;"*

*"using said keys of said map container objects as ordinary identifiers...;"*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

*"using said map container objects as namespaces;"*

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces (column 2, lines 10 – 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, because the said combination allows

the facilitation of a directory service, which uniquely identifies the names and organizes the objects for returning the proper object when accessed, as taught by Lee (column 2, lines 15 – 17).

*“directing compilers or interpreters to search at least one of said map container objects for a value of at least one of said keys used as an ordinary identifier.”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code. However, Segnan discloses a compiler that searches a table for an assigned identifier that, if found, is used (column 6, lines 4 – 11). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segnan invention having a compiler search a table for an identifier, because this combination provides a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee.

**In regard to claim 7**, incorporating the rejection of claim 6: It is rejected for the same reasons put forth in the rejection of claim 2.

**In regard to claim 11** (a storage-medium corresponding to the method of claim 1):

Claim 11 is rejected for the same reasons put forth in the rejection of claim 1.

**In regard to claim 12** (a storage-medium corresponding to the method of claim 2), incorporating the rejection of claim 11: Claim 12 is rejected for the same reasons put forth in the rejection of claim 2.

**In regard to claim 16** (a storage-medium corresponding to the method of claim 6): Claim 16 is rejected for the same reasons put forth in the rejection of claim 6.

**In regard to claim 17** (a storage-medium corresponding to the method of claim 7): Claim 17 is rejected for the same reasons put forth in the rejection of claim 6.

**In regard to claim 21:**

*“defining map container objects having keys...comprising strings conforming to requirements for identifiers;”*

*“using said keys of said map container objects as ordinary identifiers...;”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

*“declaring values of said keys as names qualified by said map container objects.”*

See Chu Figure 4.

*“using said map container objects as namespaces;”*

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces (Column 2, lines 10 – 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine

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the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, because the said combination allows the facilitation of a directory reference, as taught by Lee (column 2, lines 15 – 17), which uniquely identifies the names.

The preamble of claim 21, *“A signal propagated over a propagation medium, the signal encoded with code...causing a computer to implement a method of compiling or interpreting a source code...”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches compiling or interpreting source code caused by a propagated signal. However, Segnan discloses a compiler to generate executable code from source code (column 5, line 65 – column 6, line 11) that searches a table for an assigned identifier. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segnan invention having a compiler search the a table for an identifier, because this combination produces a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee. Further, Lee additionally discloses propagation of data over a propagation medium (e.g., see Figures 1 and 2; column 3, lines 1 – 20). Therefore, it would have been obvious to one skilled in the art at the time the



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invention was made to modify the Chu invention wherein the map container is searched for a key to be used as an identifier with the Segan invention having a compiler search the a table for an identifier, and further modified with the propagation medium as taught by Lee, because this combination enables implementation on a distributed client-server system, as taught by Lee (column 3, lines 5 – 16), capable of downloading code with instructions to a compiler to implement searches of a map container having a key that is used as an identifier to generate an instruction that is referenced to a name space.

**In regard to claim 22**, incorporating the rejection of claim 21: It is rejected for the same reasons put forth in the rejection of claim 2.

**In regard to claim 26:**

*“defining map container objects having keys...comprising strings conforming to requirements for identifiers;”*

*“using said keys of said map container objects as ordinary identifiers...;”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4).

*“using said map container objects as namespaces;”*

Chu does not disclose using map container objects as namespaces. However, Lee discloses using map container objects as namespaces (Column 2, lines 10 – 21). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of

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Lee wherein the container objects are used as namespaces, because the said combination allows the facilitation of a directory reference, as taught by Lee (column 2, lines 15 – 17), which uniquely identifies the names.

*“directing compilers or interpreters to search at least one of said map container objects for a value of at least one of said keys used as an ordinary identifier.”*

Chu discloses defining map container objects having keys composed of strings, and using the said keys as an identifier to identify values in the container objects (column 4, line 65 to column 5, line 25; e.g., Figures 2 and 4), and Lee discloses that the map container objects are namespaces (column 2, lines 10 – 21), but neither Chu nor Lee teaches that a compiler is directed to search the map container. However, Segnan discloses a compiler that searches a table for an assigned identifier that, if found, is used (column 6, lines 4 – 11). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Chu invention modified by Lee, to produce a map container that is searched for a key to be used as an identifier having the map container objects referenced to a name space, with the Segnan invention having a compiler search a table for an identifier, because this combination provides a compiler that performs the combined feature of searching a map container having a key that is used as an identifier, as taught by Chu, to generate an instruction that is referenced to a name space as taught by Lee. Further, Lee additionally discloses propagation of data over a propagation medium (e.g., see Figures 1 and 2; column 3, lines 1 – 20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the Chu invention wherein the map container is searched for a key to be used as an identifier with the Segnan invention having a compiler search the a table for an identifier, and further modified with the

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propagation medium as taught by Lee, because this combination enables implementation on a distributed client-server system, as taught by Lee (column 3, lines 5 – 16), capable of downloading code with instructions to a compiler to implement searches of a map container having a key that is used as an identifier to generate an instruction that is referenced to a name space.

**In regard to claim 27**, incorporating the rejection of claim 26: It is rejected for the same reasons put forth in the rejection of claim 2.

3. Claims 3, 4; 8, 9; 13, 14; 18, 19; 23, 24; 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 in view of Lee, U.S. Patent 5,692,180, and further in view of Allard et al., U.S. Patent 5,991,802 (hereinafter referred to as Allard).

**In regard to claim 3**, incorporating the rejection of claim 1:

*“...said objects are identified by Uniform Resource Identifiers (URLs).”*

Neither Chu nor Lee teaches that objects are identified by Uniform Resource Identifiers. However, Allard teaches that objects are identified by URLs (Abstract). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Allard teaching that objects are identified by URLs, because the URL identification allows the combination of Chen and Lee to communicate over a distributed system wherein server objects are invoked by a client system, as taught by Allard (Abstract)

**In regard to claim 4**, incorporating the rejection of claim 1:

*“...said objects are identified by environment variables.”*

Neither Chu nor Lee teaches that objects are identified by environment variables.

However, Allard teaches objects that are identified by environment variables (column 6, lines 25 – 30; column 11, lines 10 - 15). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Allard teaching that objects are identified by environment variables, because the environmental variables provide parameters for a server to properly communicate with a client when an object is accessed, as taught by Allard (column 5, line 65 to column 6, line 5), thus allowing the combination of Chen and Lee to communicate over a distributed system.

**In regard to claim 8**, incorporating the rejection of claim 6: It is rejected for the same reasons put forth in the rejection of claim 3.

**In regard to claim 9**, incorporating the rejection of claim 6: It is rejected for the same reasons put forth in the rejection of claim 4.

**In regard to claim 13** (a storage-medium corresponding to the method of claim 3), incorporating the rejection of claim 11: Claim 13 is rejected for the same reasons put forth in the rejection of claim 3.

**In regard to claim 14** (a storage-medium corresponding to the method of claim 4), incorporating the rejection of claim 11: Claim 14 is rejected for the same reasons put forth in the rejection of claim 4.

**In regard to claim 18** (a storage-medium corresponding to the method of claim 8), incorporating the rejection of claim 16: Claim 18 is rejected for the same reasons put forth in the rejection of claim 8.

**In regard to claim 19** (a storage-medium corresponding to the method of claim 9), incorporating the rejection of claim 16: Claim 19 is rejected for the same reasons put forth in the rejection of claim 9.

**In regard to claim 23**, incorporating the rejection of claim 21: Claim 23 is rejected for the same reasons put forth in the rejection of claim 3.

**In regard to claim 24**, incorporating the rejection of claim 21: Claim 24 is rejected for the same reasons put forth in the rejection of claim 4.

**In regard to claim 28**, incorporating the rejection of claim 26: Claim 28 is rejected for the same reasons put forth in the rejection of claim 8.

**In regard to claim 29**, incorporating the rejection of claim 26: Claim 29 is rejected for the same reasons put forth in the rejection of claim 9.

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4. Claims 5; 10; 15; 20; 25; and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al., U.S. Patent 6,356,913 in view of Lee, U.S. Patent 5,692,180, and further in view of Klots et al., U.S. Patent 6,173,313 (hereinafter referred to as Klots).

**In regard to claim 5**, incorporating the rejection of claim 1:

*"...said objects are identified by run-time name resolution schemes."*

Neither Chu nor Lee teaches that objects are identified by environment variables. However, Klots teaches objects that are identified by environment variables (column 1, lines 52 – 67). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Chu regarding defining map container objects having keys, with the teaching of Lee wherein the container objects are used as namespaces, and further modified by the Klots teaching wherein objects are identified by name resolution schemes, because this modification allows an embedded object name in a URL to be recovered, as taught by Klots (column 1, lines 60 – 67), while providing a means for the combination of Chen and Lee to operate over a distributed system.

**In regard to claim 10**, incorporating the rejection of claim 6: It is rejected for the same reasons put forth in the rejection of claim 5.

**In regard to claim 15** (a storage-medium corresponding to the method of claim 5), incorporating the rejection of claim 11: Claim 15 is rejected for the same reasons put forth in the rejection of claim 5.

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**In regard to claim 20** (a storage-medium corresponding to the method of claim 10), incorporating the rejection of claim 16: Claim 20 is rejected for the same reasons put forth in the rejection of claim 10.

**In regard to claim 25**, incorporating the rejection of claim 21: Claim 25 is rejected for the same reasons put forth in the rejection of claim 5.

**In regard to claim 30**, incorporating the rejection of claim 26: Claim 30 is rejected for the same reasons put forth in the rejection of claim 10.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent 6,427,229 to Brobst et al., regarding containers and key strings.

U.S. Patent 6,587,928 to Periyannan et al., regarding identifying objects with URLs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046.

The examiner can normally be reached on M-F 08:00-16:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lawrence Shrader  
Examiner  
Art unit 2124

September 29, 2003



JOHN CHAVIS  
PATENT EXAMINER  
ART UNIT 2124